

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-4. (Canceled)

5. (Currently amended): A circuit comprising:

a switch configured to couple a target circuit with a source of power;

a first detector configured to detect power provided by the source of power, the first detector operatively coupled with the switch, wherein the switch closes responsive to the first detector; and

a second detector configured to detect noise in the power, the second detector operatively coupled to the switch, wherein a conductivity of the switch varies responsive to the second detector[.];

a positive terminal; and

a negative terminal,

wherein the switch is a transistor device having a gate, a source, and a drain,

wherein the second detector comprises:

a bias voltage source;

an operational amplifier having:

an inverting input coupled with the positive terminal and coupled with the bias voltage source;

a non-inverting input coupled with a negative terminal; and

an output coupled to the gate of the switch,

wherein the bias voltage source is coupled with the first detector.

6. (Original): The circuit of claim 5 wherein the second detector couples between the source of power source and a gate of the switch.

7. (Canceled)

1 8. (Original): The circuit of claim 7 wherein the output of the operational
2 amplifier couples with the first detector.

9. (Canceled)

1 10. (Currently amended): The circuit of claim ~~9~~5 wherein the bias voltage
2 source is a voltage divider.

1 11. (Previously presented): A circuit for coupling a power source to an
2 electronic device comprising:
3 first circuit means for detecting a connection event wherein a connection is made
4 between a device and a power source, the first circuit means configured to be selectively coupled
5 to and decoupled from the power source;
6 second circuit means, responsive to the first circuit means, for coupling power
7 from the power source to the electronic device so that power is applied to the electronic device in
8 a gradual manner;
9 third circuit means for detecting an overcurrent event wherein the electronic
10 device draws current from the power source exceeding a predetermined level of current; and
11 fourth circuit means for reducing the amount of power that is applied to the
12 electronic device in response to the third means.

1 12. (Previously presented): The circuit of claim 11 further including fifth
2 circuit means for producing a signal indicative of an occurrence of the overcurrent event.

1 13. (Previously presented): The circuit of claim 11 further including a first
2 connection terminal and a second power connection terminal, the power connection terminals
3 suitable for connection to the power source, the third circuit means operable to detect an
4 overcurrent event by monitoring electrical activity on only one of the first and second connection
5 terminals.

1 14. (Previously presented): The circuit of claim 11 further including fifth
2 circuit means for detecting electrical noise in the power, the second circuit means further being
3 responsive to the fifth circuit means by varying the amount of power that is applied to the
4 electronic device.

1 15. (Previously presented): The circuit of claim 11 wherein the fourth circuit
2 means is effective for decoupling the power supply from the electronic device.

1 16. (Previously presented): A circuit for coupling a power source to a device
2 comprising:

3 first circuit means for detecting a connection event wherein a connection is made
4 between a device and a power source, the first circuit means configured to be selectively coupled
5 to and decoupled from the power source;

6 second circuit means, responsive to the first circuit means, for coupling power
7 from the power source to the device, the second circuit means operable to vary the amount of
8 power that is applied to the device;

9 third circuit means for detecting a change in an electrical parameter of the second
10 circuit means indicative of a disconnection between the circuit and the power source;

11 fourth circuit means for decoupling the power source from the device in response
12 to the third means.

1 17. (Previously presented): The method of claim 16 further including fifth
2 circuit means for producing a signal indicative of an occurrence of the disconnection between the
3 circuit and the power source.

1 18. (Previously presented): The circuit of claim 16 further including fifth
2 circuit means for detecting electrical noise in the power source, the second circuit means further
3 being responsive to the fifth circuit means by varying the amount of power that is applied to the
4 device.

1 19. (Previously presented): A circuit for coupling a power source to a device
2 comprising:

3 first circuit means for detecting a connection event wherein a connection is made
4 between a device and a power source, the first circuit means configured to be selectively coupled
5 to and decoupled from the power source;

6 second circuit means, responsive to the first circuit means, for providing a varying
7 amount of power from the power source to the device;

8 third circuit means for detecting when the device draws current from the power
9 source exceeding a predetermined level of current;

10 fourth circuit means for decoupling the power source from the device in response
11 to the third means;

12 fifth circuit means for detecting a change in an electrical parameter of the second
13 circuit means indicative of a disconnection between the circuit and the power source; and

14 sixth circuit means for decoupling the power source from the device in response
15 to the fifth means.

1 20. (Previously presented): The circuit of claim 19 further including seventh
2 circuit means for detecting electrical noise in the power, the second circuit means further being
3 responsive to the seventh circuit means by varying the amount of power that is applied to the
4 device.